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## ABSTRACT

Contracted by the U.S. Office of Education, this program utilized a mobile office-education unit designed to provide office education to migrant workers in Brigham City, Utah, to thus expand their vocational opportunities. Stated objectives were that each student would (1) demonstrate "touch" knowledge of the typing keyboard and skills necessary to type from copy, (2) increase his spelling ability, (3) increase his English usage capability, (4) increase his English reading capability, and (5) demonstrate ability to solve routine practical arithmetic problems. The 17 two-hour evening sessions, held Tuesday/Thursday and Monday/Wednesday, were attended at least once by 29 students (19 students attended 5 or more sessions). Evaluation of the objectives was based on results of interviews, observations, objective testing, attendance data, and data from the Utah Migrant Council. Using the Wilcoxons' signed ranks test and the u- and F-tests on test scores, it was determined that the first 4 stated objectives were met by most students. The fifth objective had been met before program institution. Typing skills gained were negligible but contributed to large gains in spelling, English usage, and reading skills. Six tables and recommendations are included. A related document is ED 043 446. (NJB)



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EVALUATION OF MOBILE OFFICE EDUCATION
UNIT UTILIZATION WITH MIGRANT WORKERS IN
BOX ELDER SCHOOL DISTRICT

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# FINAL EVALUATION VOCATIONAL EDUCATION OF MIGRANTS USING MOBILE OFFICE EDUCATION FACILITIES

This report is an evaluation of the educational program for migrants, held June 17 to August 18, 1970, Brigham City, Utah.

### INTRODUCTION

The primary goal of the Mobile Office Vducation for Migrants Project was to provide vocational education that would expand the vocational opportunities of the students.

During the summer of 1970, evening classes for migrants were conducted in a mobile classroom designed to teach office occupations skills. The classroom was located at Box Elder High School, Brigham City, Utah. Personnel included Juliette Chlarson, teacher, and James Bingham, teacher-aide. Both were residents of the area and spoke both English and Spanish.

In mid-June, before classes began, the teacher specified the following objectives:

- 1. Each student will demonstrate "touch" knowledge of the typing keyboard and skills necessary to type from copy.
- 2. Each student will increase his spelling ability.
- 3. Each student will increase his English reading capability.
- 4. Each student will increase his English usage capability.
- 5. Each student will demonstrate ability to solve routine practical arithmetic problems.

In informal discussions with the observer, the teacher also indicated she would like to improve the students' self image, attitude toward schools, and ability to cope with situations such as interaction with public officials.

# **PURPOSE**

The purposes of this evaluation were:

- 1. To provide an overview of the population and the project;
- 2. To provide measures of achievement of the specified objectives;
- 3. To provide other data relevant to assessment of the project goals;
- 4. To provide a summary evaluation of the project; and
- 5. To provide recommendations for similar projects.



### DATA SOURCES

Evaluation of the project was based on the results of interviews, observations, objective testing, attendance data supplied by the teacher, and data supplied by the Utah Migrant Council.

## <u>Interviews</u>

Casual interviews were held with six migrant adults located in the Tremonton area, with an employer of migrant workers, and with a representative of the Utah Migrant Council. Other interviews were held with the teacher, teaching assistant, and project supervisor. All of the students who completed the program were interviewed at least once, and conversations were also held with some of the students who did not complete the course.

#### Observation

The observer was present at more than half of the class sessions, though he was often administering tests or interviews and saw little of class activities. He tried not to interfere with class activities or influence the class activities, although he provided some feedback to the teacher when asked for suggestions or comments, and in a few cases, made suggestions to students that seemed obviously appropriate. Interviews and testing reduced student class time by using approximately 34 of the 357 total student class hours.

## Objective Testing

Objective tests of both ability and achievement were undertaken.

Ability. Student ability was assessed by use of the performance section of the Wechsler Adult Intelligence Scale. (WAIS) In the case of fifteen year old students, norms for age sixteen were used, but otherwise the tests were routinely administered and scored.

Achievement. Typing achievement was measured by the teacher, using routine typing tests of two and three minutes duration. The typing rate was based on an average of two or three tests and was reported as average words per minute (disregarding errors) and average errors per minute.

Spelling ability was assessed by administering a list of words of gradually increasing difficulty. Each student's score was the sequence number of the last correctly spelled word before the fifth error.

The reading facility section of the Zip Test was found to have little discrimination power, so an alternate expedient was devised by using the same list of words as was used in the spelling test. Scores were determined as in the spelling tests.

Scott, Norval C., Jr., Zip Test: A Quick Locator Test for Migrant Children. <u>Journal of Educational Measurement</u>, 1970, 7, 49-50.



A modified version of the following subtests of the  $\operatorname{Zip}$  Test were used:

- 1. Language facility
- 2. Word Opposites
- 3. Addition
- 4. Subtraction
- 5. Multiplication
- 6. Division

The modified scoring of the test was prompted by two considerations: the desire to reduce administration time; and the goal of measuring optimum performance even at the cost of decreased discrimination. In administering the additional section, the subject was asked if he could add. If he indicated that he could not or seemed in doubt, he was asked if he could add the easiest row (A) of the subtest. If he indicated that he could (they all did), he was asked if he could do "these" and "these," indicating more and more difficult problems. If he said he could do all of them, he was allowed to compute the last row. If he got two of those three problems correct, he was given the maximum score. If he failed this row, he was allowed to go back to a level he could get two of three correct. If he expressed doubt of his ability to complete a row, he was allowed to go back to one he could do, and then was asked to attempt problems, even if he could not complete them.

The reason for allowing one missed problem in three was to remove the "Power" function from the test. The object was not to measure careless errors or an occasional mistake but rather the maximum capability of the student given the necessary time and motivation to complete and check the problems.

## STATISTICAL TREATMENTS

Tests of significant differences between pre-test and post-test scores were performed, using Wilcoxons' signed ranks test. The number of class sessions attended between pre-test and post-test ranged from four to six.

A <u>u</u>-test of the difference between WAIS performance scores and the population was made. Because the dispersion of the WAIS scores seemed large, an  $\underline{F}$ -test of differences between population and sample variance was performed.

## POPULATION

An effort to interview a few migrant families soon demonstrated why little documented data is available. The homes of students were typically scattered over a wide area, one or more miles apart. The people were typically



-3-

shy, retiring, reticent to talk to strangers, and often did not speak fluent English. Although the quality of housing varies, the homes were usually dilapidated and had little or no furniture.

Although no demographic data are available for 1970, they are probably about the same as in 1969, and these are reported below.

It is estimated that 18,000 migrants came to Utah in 1969. Most of these were Mexican Americans, came from Texas, and stayed from two to four months. Most workers bring their families with them and find employment in the agriculture industries, usually unskilled farm labor. Utah migrant families have an average of six children, and adults have a median educational level of six years. Box Elder County had an estimated Mexican American population of 1,622 in 1969, more than half of whom were migrant.

### Resident Interviews

Most of the migrant adults put a high value on formal education. When asked what schools could teach that would be most valuable to them, they generally answered without hesitation. Most could not speak English fluently, and regarded English usage as their most immediate need.

They usually expressed a desire to learn vocational skills, but had little knowledge of the variety of vocational opportunities.

When parents near Tremonton were asked if they would like their children to go to the classes in Brigham City, they sometimes said they thought it was too far, especially for girls, but most thought that schooling was valuable.

One of those interviewed was a man in his late teens or early twenties. At first he was distinctly hostile toward formal education, but later expressed interest in learning auto mechanics. He had recently married, was unemployed, and concerned about how he could support himself and his wife. He was planning to look for work at some local farms, but he doubted that he would be hired.

Three attitudes toward education were evident: hostility; the feeling that it was personally irrelevant, but good for some people; and the attitude that education was a cure-all.

## Student Recruitment

Those responsible for enlisting migrant students tried several procedures. The Utah Migrant Council was contacted on two occasions and, at both times, attempted to enroll interested students. Three college students tried to recruit interested students, but two of these became discouraged and gave up the effort. Nearly all the students were enrolled by the teaching assistant, who also transported the students to and from school. He knew most of the families of the students prior to his contacts with them regarding the school.

The recruiter said he discussed the school with those whom he thought would make good students. When questioned about how he could recognize good students, he indicated that they were ones who were "...nice people...hard working...and smart." When asked if he judged this by how verbal, outgoing,



and assertive they were, he replied that he thought so. As students dropped out, it became necessary to try to recruit more, so recruitment efforts continued sporadically until the last week in July. The observer felt that, as recruitment efforts continued, they became less discriminating. Getting migrant students—any students—became the prime goal.

### SAMPLE

Student interviews were usually interspersed with testing. Thus, the information was obtained in bits and pieces and is more complete in some cases than others. Some of the information reported in student interviews was obtained from other sources, but this is evident from the context.

An effort was made to elicit information concerning:

- 1. The family and where they lived;
- 2. Their educational experience and goals;
- 3. Their vocational experience and goals;
- 4. Why they attended the class;
- 5. What they liked best about the class;
- 6. What they liked least about the class;
- 7. What aspect of the program they regarded as most valuable;
- 8. What they would recommend to improve the program.

They were also asked their opinion of the instructors. All of those interviewed were very fond of the instructors and enthusiastically approved of the teaching methods. All of them also appeared generally well groomed, courteous, and eager to please. Because most of the subjects seemed to have little knowledge of the varieties of available vocations, they were asked if they would attend a class providing information about various vocations, what education is required, how to get jobs, and other aspects of jobs that interested them. They were all eager to get such information. This response may have been motivated by a desire to please the interviewer, but he thought it was usually an honest response.

## Student A: Age 22, Female.

Student A was well groomed, amiable and cheerful. She was living in Tremonton, with the family of her husband, who was on active duty in the armed forces. The family home of the subject was in Panama. She reported that she had completed high school and worked as a typist and secretary in Panama. She described her purpose in attending the class as improving her knowledge of English and gaining skills required of American secretaries. In the final interview she reported that the typing had been of great value, since she had never used an electric typewriter or typed English. She felt the class had been of greatest value because it had improved her English usage. She also commented favorably on the lecture on grooming.

She was enthusiastic in her praise of the program and had no suggestions for improvement.



## Student B: Age 15, Female

Student B was well groomed, pleasant but subdued. She was the youngest of eight children, and since all the others had left home, she wanted to do likewise. She regarded her permanent home as Texas and expected to return there in October.

Having completed the eighth grade, she hoped to go to business school in order to become a secretary, but was afraid her father would object. She said that typing was "fun" and that she did not like the other subjects.

She had no suggestions for improving the program.

Student C: Age 18, Female. Sister of Student D.

Student C was reluctant to discuss her educational background or goals but became very communicative when discussing her hopes for the future. The family had lived in Tremonton for two years but planned to return to Texas this fall.

The subject had completed sixth grade and did not want to go back to school. She had worked as a teacher-aide for the elementary school in Bear River. She was reputedly given this job to encourage her and her sister to continue their education, since their skills were very limited.

Student C said she did not like working in the school but would like to be a stewardess or nurse so that she could travel and help people. She also thought she would like to be a chemist, but thought that if she worked in an office she would like to be a receptionist. She did not want to be a typist.

She thought the electric typewriters were fun, but was ambiguous about any benefits that might be derived from the program.

Student D: Age 23, Female. Sister of Student C.

Student D was amiable, well groomed, and eager to please. She felt very dependent on her younger sister and would not attend class unless her sister did. She felt that formal education was very necessary, and was unusually persistent and conscientious in doing her schoolwork. The subject had completed sixth grade and hoped to continue her education in a secretarial training program.

She said that she took the class to improve her spelling and reading, and to learn to type. At the end of the class she felt that the typing lessons were the most useful and were the most fun. Although she was not doing well, she hoped this class would help her when she took further training in October.

She had no suggestions for improving the program.



Student E: Age 18, Male. Brother of Student F.

Student E was pleasant and cooperative, but rather shy when talking to non-migrants. With other migrants he was jovial and rather boisterous.

The subject came from a family of ten children. He regarded his home state as Texas and doubted that his family would return to Utah because of low pay and high prices.

He had completed ninth grade, planned to finish high school, and had no further educational plans.

He regarded himself as a farm laborer and was very uncertain of his vocational future. He thought that farm labor would be replaced by machines.

He felt that the most useful part of the program was discussion of English usage. He doubted that the typing would be of value to him, but had no suggestions for improving the program.

Student F: Age 16, Female. Sister of Student E.

Student F was very demure, dainty, and attractive. She was more articulate in English than her brother, who seemed to have difficulty expressing himself. The family spoke Spanish around the home.

She had completed the ninth grade at Edinburg, Texas, and planned to complete high school there. She indicated that she had no vocational goals, but planned to take typing 1. school next fall. When asked why she was taking typing, she replied that she liked it. When pressed, she agreed that it might be vocationally valuable.

The subject regarded the class as fun and regarded the typing as valuable because it would give her a head start in school the next year. She did not like the arithmetic review sessions, but had no other complaints or recommendations.

Student G: Age 21, Female.

Student G was unusually vivacious, outgoing, and confident.

Her family was returning to Texas in December.

She had finished the eighth grade and did not want to return to school unless it was to prepare her for a vocation.

She said she typed before, but not as a full time job. She was then working in a day care center. She wanted to work as an office receptionist or someplace where she could meet people. She did not want to be an office secretary.

Subject said that she came to the class to have someplace to go and meet people.



When asked what she liked least about the class, she replied that it was the arithmetic sessions. She thought using an electric typewriter was fun, but she wouldn't want to do it for a living.

She had no suggestions for improving the program.

Student H: Age 17, Male.

Student H was less open and verbal than most of the students, but was unusually attractive and well groomed. He planned to return to Texas about the first of August, and thus could not complete the program.

He had completed sixth grade and hoped to continue his education in the  $\mbox{\mbox{\sc Army}}$  .

His only vocational experience was as a farm laborer, and his expressed vocational goal was military service.

Student I: Age 16, Male. Brother of Student J.

Student I was less open and amiable than others. His home was Texas and his local residence was near Tremonton. He had completed third grade and reported that he would like to return to school; the interviewer doubted the sincerity of this stated goal.

His only vocational experience was that of far... laborer and he envisioned no other work in the future.

He came to the class because his brother did. He thought typing was fun, but saw no value in the skill

Student J: Age 15, Male. Brother of Student I.

Student J was unusually verbal, assertive, confident, and polished. His family came to Utah from Texas every summer. He had completed eighth grade and planned to finish high school and a trade school. He wanted to become a disc jockey. He didn't like the movies, but otherwise had no suggestions for improvements in the program. He thought that typing was a useful skill, but that the discussion of English usage was the most valuable aspect of the course.

Student K: Age 16, Female.

Student K was rather shy and demure. Her father objected to her coming to the class because he thought she was too young to travel so far (20 miles). The family are permanent residents of the Tremonton area.

She has graduated from high school and would like to become  $\boldsymbol{\alpha}$  secretary.

Student L: Age 16, Female.

Student L was unusually attractive, vivacious, outgoing and



poised. She is married to a soldier who is going to be stationed in Germany where she hopes to join him. She is the sister-in-law of students I and J, and is a two-year resident of the Penrose area.

This subject has completed seventh grade, but would like to complete college in order to become a teacher. She is presently working in a day care center. She felt that the most valuable aspects of the course were its improvement of her English usage, and the grooming lecture; she thought that typing was fun.

She had no suggestions for improving the program.

Student M: Age 15, Male.

Student M was shy, cautious, and reserved. He came from a Texas migrant family who usually traveled to Utah each summer. He had completed eighth grade and planned to complete high school. He was working as a farm laborer and reported that he had no vocational plans.

#### CLASS ACTIVITIES AND ATTENDANCE

Classes met two nights a week, one on Monday and Wednesday, another on Tuesday and Thursday. Although it was planned that each session would last from 8:00 to 10:00 p.m., class periods typically lasted from  $1\frac{1}{2}$  hours to 1-3/4 hours.

In the course of the seventeen sessions two movies were provided, one 20-minute film dealing with the history of the rodeo, and one 50-minute film on a boy's summer camp (Outward Bound) in the Colorado Rockies. To increase the students' comprehension of their Spanish-American heritage, a slide show was provided on South American culture, and a beautician provided a one-hour talk on grooming procedures.

Other lessons and discussions provided the students with practice in English usage, reading, spelling, and arithmetic computations. The estimated distribution of class hours are reported in Table 1.

#### TABLE 1

## CLASS ACTIVITIES

Total Hrs. for 18 Days	32 Hrs.
Typing	14 Hrs.
English Usage	5 Hrs.
Reading	4 Hrs.
Spelling	2 Hrs.
Miscellaneous	3 Hrs.
Arithmetic	1 Hr.
Testing	3 Hrs.



Attendance records are displayed in Tables 2 and 3. Table 4 is the frequency histograms of attendance.

TABLE 2

CLASS ATTENDANCE

Monday - Wednesday Class

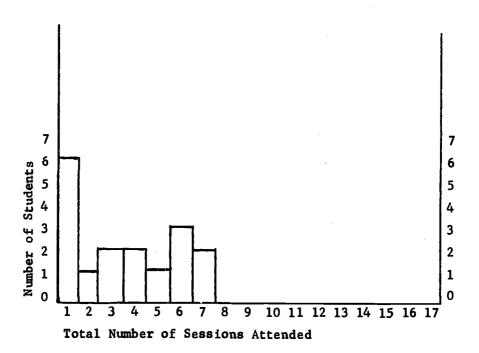
nt .	Dates												
Scudent No.	7/20 7/22 7/27 7/29 8/3 8/5 8/10 8/12 8/17 8/19 8/24 8/26											Total	
တ်	//20	1/22	1/2/	7/29	8/3	8/5	8/10	8/12	8/1/	8/19	8/24	8/26	H
1.	1	1	1		1	1	1		1			_	7
2.	1	1	1		1	1	1		1				7
3.	1	1	1			1	1		1				6
4.	1	1	1			1	1		1				6
5.	1	1	1			1	1		1				6
6.		1	1	1	1				1				5
7.		1		1	1				1				4
8.		1	1	1					1				4
9.		1	1	1									3
10.		1		1					1				3
11.		1	1										2
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13.		:							1				1
14.								1	1				1
15.									1				1
16.			1										1
17.			1										1

CLASS ATTENDANCE Tuesday - Thursday Class TABLE 3

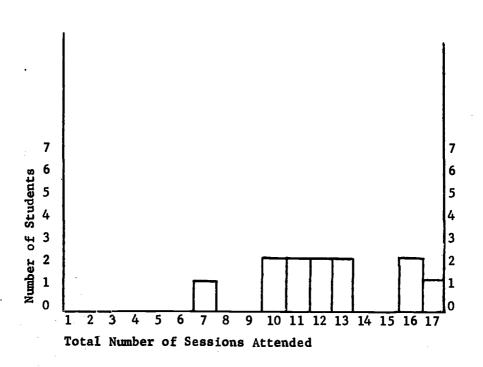
tal	Total		16	16	13	13	12	11	12	11	10	10	7
	8/18	1				1	1	1	1	1			
	8/13												
	8/11	ĵ.	1	1	1	1	1	1	1	1		1	
	9/8	1		1		1	1	1	1				
	8/4	1	1	1		1	1		1	1		1	1
	7/30	1	1	1	1			1		1	1	1	
	7/28	1	1	1		1		1		1	1	1	-1
	7/23	1	1	1	1	1	1	1	1			1	1
	7/21	1	1	1	1	1	1	1	1	1		1	1
DATES	7/16	1	1	1	1	1	1	1	1	1	1	1	1
ū	7/14	1	1	1	1	1	1	1	1	1	1	1	1
	6/1	1	1	1	1	1	1	1	1		1	1	
	7/7	1	1	1	1	1	1	1	1		1	1	1
	7/2	1	1			⊹≓	1		1	1			
	6/30		1	1	1	1	1		1		1		
	6/17 6/18 6/24 6/25 6	1	1	1	1					1	1		
	6/24	1	1	1	1						1		
	6/18	1	1	1	1		·			1	1		
	6/17	1	1	1	1				·				
dent o	N N	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.

TABLE 4

FREQUENCY OF ATTENDANCE
Monday - Wednesday Class



Tuesday - Thursday Class





## OBJECT: "E TESTING

Testing and interviewing were conducted so as to cause as little disruption of class activities as possible. As a result, it was difficult to
control the number of classes attended between pre-tests and post-tests, or to
assure that all the students who completed the course would receive the full
battery. Eighteen students were tested, and six were administered the pre and
post battery. The number of sessions attended between pre-tests and post-tests
ranged from four to six. Test scores are reported in Table 5.

TABLE 5
OBJECTIVE TEST RESULTS

	Student Identification	Days Present Maximum = 17	WAIS Performance Mean = 100	Typing Words Per Minute	Typing Errors Per Minute	Addition Maximum = 10	Subtraction Maximum = 9	Multiplication Maximum = 6	Division Maximum = 5	Opposites Maximum = 56	Reading Maximum = 50	Language Facility Maximum = 40	Spelling Maximum = 50	Arithmetic Total Maximum = 30	English Usage Total Maximum = 196	Total Arithmetic & English. Maximum = 226
pre	18		118			10	<del>9</del> -	6	<u>5</u>	36 38	40	40	30	30 30	146 149	176 179
post		17		24	3	10		6	5	38	40	40	33	30	149	179
pre	19		89			10	9	6	5	37	19	28_	8	30	92	122
post		16		13	3	<u> </u>	<u> </u>	<b>-</b>					<b></b>			
pre	_20_		86	L		$-\frac{10}{10}$	<del>9</del> -	<u>5</u> -	<u>3</u>	45 47	3 <u>1</u> 33	36 37	13 17	27 28	125 134	152 162
post		16		-						47						
pre	21_	<u> </u>	ļ	L		10_	9_	4	4	56	40	40	33	27	169	196
post		13	<u> </u>			<b>-</b>						<u> </u>	<b> </b>			
pre	_22_		87_			_ <u>10</u> 10	<u>9</u> -	<u>6</u> -	<u>3</u>	26 31	<u>26</u> _ 31	- <u>28</u> -36	$-\frac{16}{17}$	28 29	8 <u>6</u> 110	114
post		13		12	4	10		6	4	31	31	36_		29	110	139
pre	<b>2</b> 3		_77_			<u>10</u> 10	<u>9</u> -	<u>0</u> _	<u>0</u>	5 8	· <u>2</u> -	$-\frac{18}{22}$	$-\frac{1}{3}$	19 19	<u>26</u> 38	<u>45</u> 57
post		12		ō×		10		0				22		19	38	57
pre	24		107_			10 10	<u>9</u> -	6	<u>-5</u>	25 50	7 <u>5</u> 33	- <u>37</u> - <u>39</u>	8	30 30	8 <u>5</u> 142	115 172
post		11		42*	* 2	10	9	6	5	50	33	39	20	30	142	172
pre	25		ļ				ļ	<b></b> -				L	<b></b> -		<b> </b>	<b> </b>
post		12		16	7	<u> </u>	-	<del>  _</del>				<u> </u>	<u> </u>		<del></del>	
pre	_26_		114_			$-\frac{10}{10}$	9_	6	2	$-\frac{17}{24}$	- <u>25</u> - 34	24 36	$-\frac{11}{24}$	$-\frac{27}{27}$	77	104 145
post		11	-	43*	* 2		9	6	2	24	34	36	24	27	118	
pre	27_		108	<b></b>		_10_	9_	5_	3	37	_17_	38	5_	27.	97	124
post		10					<u> </u>	<u> </u>								
pre	28		95_	L		10_	9_	5	0	29	16	35	11.	24	91	115
post		9-	<del> </del> _				<u> </u>	<del> </del> -			<u> </u>		<u> </u>		<u> </u>	<u> </u>
pre	29_		81	<b></b> -		10	7_	3-	0	1 25	6	31	1	20 26	39 115	59 141
post		7	<u> </u>	<u> </u>		70	9	1 4_	3	25	36	44	10	26	115	141

<sup>\*</sup> Student did not know keyboard well enough to take test.



<sup>\*\*</sup> Student could type prior to entering class.

## RESULTS OF STATISTICAL TREATMENTS

Six pairs of pre and post test results were obtained. The results of the Wilcoxon's sign tests are reported in Table 6. This was a test to determine which subtests measured significant improvement in student performance.

TABLE 6
WILCOXON'S SIGN TEST RESULTS

Achievement	Wilcoxon Value	One Tailed Significance Level
Total	0	•025
Verba1	0	•025
Spelling	0	•025
Language Facility	0	•025
Reading	0	•025
Opposites	0	.025
Arithmetic	0	•025
Division	0	.025
Multiplication	Indeterminate	-
Subtraction	Indeterminate	•
Addition	Indeterminate	-

An  $\underline{F}$ -test of difference between sample and population variance was performed on the 10 WAIS Performance scores.

As might be expected from inspection, the difference was not significant (F=1.08). A <u>u</u>-test of differences between sample and population means was performed. This was also not significant (z=0.12).

## DISCUSSION

The  $\underline{F}$  and  $\underline{u}$  tests just reported indicate that the students did not differ in Performance I. Q. from the general United States population. But the interviews indicated that their educational level was distinctly low. The mean age was 17.5 and the mean grade attained was 7.8. It is also evident from the interviews that the students had a very limited knowledge of vocations and the educational prerequisites for vocations.

The attendance data is difficult to explain. The 17 Monday-Wednesday students attended no more than seven sessions, while the 12 Tuesday-Thursday students attended from seven to seventeen sessions. Since last years Monday-Wednesday class had to be abandoned for lack of students, it seems as if Monday-Wednesday classes are less regularly attended.

Of the twenty-nine students who attended the classes at least once, nineteen students attended five or more class sessions. It is unclear why



about one-third of the students chose to drop out, but some remarks may be helpful.

It would seem that the students who attended regularly were more enterprising than the general population. Most were intensely interested in furthering their education. Once the original Tuesday-Thursday class of about eight students was established, they formed an "in-group" not easily entered by new students. The Monday-Wednesday class, however, exhibited less group affiliation, and failed to maintain attendance.

Part of the difficulty in retaining students resulted from students not wanting to learn office skills. The teacher and the assistant, however, were sensitive to student desires and, except for typing, tried to tailor the class curriculum to meet the most pressing educational needs.

Nineteen students attended five or more class sessions. Since the pre-post test interval was four-six sessions, it is assumed that these students received treatment and benefits similar to those tested.

The only gain in arithmetic skill was on division problems. Although improvement was statistically significant, it was quantitatively negligible. All of the students could add, subtract, multiply, and divide (except for problems involving decimals and fractions), so the arithmetic test could not demonstrate any achievement. The objective of solving routine arithmetic problems was met before the project began.

The class showed improvement on all English usage subtests. Although this increase cannot be expressed in grade levels, the test administrator was surprised to find that so much improvement in English usage could be made in so short a time.

The gain in typing skills by non-typists was negligible. The two girls who already knew how to type gained skills which they considered vocationally valuable. The non-typist who did best on the final typing test (24 wpm with three mistakes) was planning to take typing in school the following fall. Typing was valuable as a carrier task for learning English usage. Because it was fun, it attracted and held some students who would not otherwise have come to the class. But, it may also have prevented some students from attending because they thought it inappropriate.

Pre-program planning was inadequate. There was no stated provision for determining student needs and establishing priorities based on these needs. The flexibility and adaptability in the program was dependent on the ingenuity of the teacher and teacher-aide and was hampered by the nature of the facilities available.

## SUMMARY AND CONCLUSIONS

The stated 1970 objectives of the Mobile Office Education for Migrants Project were as follows:

1. Each student will demonstrate "touch" knowledge of the typing keyboard and skills necessary to type from copy.



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- 2. Each student will increase his spelling ability.
- 3. Each student will increase his English usage capability.
- 4. Each student will increase his English reading capability.
- 5. Each student will demonstrate ability to solve routine practical arithmetic problems.

Seventeen 1½ to 1-3/4 hour sessions were held for the Tuesday-Thursday class and eight were held for the Monday-Wednesday class. The number of sessions attended by each student ranged from one to seventeen. The number of sessions attended between pre and post achievement tests ranged from four to six.

The first four stated objectives were met by most of the students. The fifth objective was attained before the program started. The typing skill attained by those who had not typed before was of negligible value. The typing experience, however, contributed to the large gains in spelling, English usage, and English reading skills.

### **RECOMMENDATIONS**

Since migrants move so often, it would be almost impossible to systematically design an educational program to meet their needs. However, since recruitment requires personal contact with the migrant families, this contact could be used to provide some information on educational needs and desires.

Interesting and practical achievement tests could be given on the first class session attended; the results would motivate both student and teacher to center their attention on important educational needs.

Class attendance could probably be improved if the programs were patently relevant to student needs, though attendance is likely to be sporadic because of the irregular work schedule of farm labor. If instructional units were small, then irregular attendance would not be so likely to interfere with program benefits.

Providing educational facilities near the students' homes would make attendance easier.

The teacher and aide said they had learned a lot from the experience. Annual teacher turnover should be avoided. Use of teachers (preferably bilingual) who are experienced in teaching migrants should be encouraged. Use of teachers who know the migrant families in the area is also to be encouraged.

The recruitment methods and the subject matter presented discouraged attendance by those hostile to traditional schools and those with low communication skills. Didactic classroom procedures should be avoided. Instruction in mathematics and communication skills needs to be immediately and obviously useful. For instance: reading and writing can center lessons around vocational information and preparation of employment applications;



and arithmetic skills can be practices using payroll and budget problems. Competition between students tends to discourage the poor student and is to be avoided.

Since most of the migrants spend winters in Texas, and since Texas uses the Uniform Migrant Transfer Record, it is recommended that Utah utilize and cooperate with this attempt to improve educational record transfers.

The educational needs of the migrant population are evident. It is strongly recommended that another pilot effort in adult education be attempted in 1971.



<sup>&</sup>lt;sup>2</sup>Texas Education Agency, <u>Texas Project for The Education of Migrant Children</u>. Annual Evaluations Report Division of Compensatory Education, Austin, Texas, 1967.